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June 15, 1998

JUN 15 1998

Mr. Mortimer A. Gelston, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051 CONNECTICUT SITING COUNCIL

Dear Chairman Gelston:

Omnipoint Communications, Inc. ("O.C.I")) is pleased to submit this petition for a PCS antenna installation. Please find attached twenty (20) copies of a petition requesting a determination that no Certificate of Environmental Compatibility and Public Need is required for the proposed modifications to a Connecticut Light and Power (CL&P) high-voltage electric transmission line support structure. A check in the amount of \$500 to cover the filing fee for this petition is also enclosed.

O.C.I. has received authorization from CL&P for this project as evidenced by their authorization letter (made part of the attached petition as Exhibit A). Omnipoint and CL&P have finalized a structural analysis of the tower. Upon successful completion of the analysis, we believe this represents a great opportunity to take advantage of existing high-voltage transmission structures thereby reducing the need for additional wireless communications towers.

The Chief Elected Official of Wilton has been sent notice of this petition by certified mail.

Sinedigiy,

Sharon Burrows

Regional Director - CRA

for Omnipoint Communications, Inc.

cc:

Joel Rinebold, Connecticut Siting Council

Robert E. Carberry, Northeast Utilities Service Company

Linda Carroll, Northeast Utilities

Robert H. Russel, Wilton

Petition of Omnipoint Communications, Inc. to the Connecticut Siting Council for a Declaratory Ruling that a Modification to an Electrical Transmission Line in Wilton, Connecticut, to electrical transmission structure #2997, does not require a Certificate of Environmental Compatibility and Public Need as the Proposed Modification will not have a Substantial Adverse Environmental Effect.

Dated: June 10, 1998 in Wilton, CT

Introduction

Omnipoint Communciations, Inc. ("O.C.I." or the "petitioner") hereby petitions the Connecticut Siting Council for a determination that a Certificate of Environmental Compatibility and Public Need (Certificate") is not required pursuant to Section 16-50g. et seq. Of the General Statues of Connecticut for the modification of the Connecticut Light & Power Company ("CL&P") electric transmission facility described herein. The modification involves the installation of one (1) PCS antenna model # EMS TRR90-17-000DP or equivalent and associated equipment and utility routing within the existing CL&P transmission line. O.C.I. submits that no such Certificate is required because the proposed modification will not have a substantial adverse environmental effect.

O.C.I. as Petitioner

O.C.I. has received authorization from CL&P for this project as evidenced by their authorization letter attached as Exhibit A. O.C.I. is the "A Block" Wideband PCS license holder for the 1.9-GH_Z PCS frequencies for the greater New York City area, which includes the entire State of Connecticut. The O.C.I. wireless service is a voice-data system which will be capable of providing to the consumer state-of-the-art

communications service with privacy to users, and the convenience of a pager, answering machine, and modem in one phone. The proposed modification is in support of the new O.C.I. PCS network. The public need for "Widebank PCS" facilities has been determined by the Federal Communications Commission to be sufficient to allow the operation of up to 6 competing companies with overlapping coverage areas.

Description of the Project

O.C.I. proposes to install one (1) PCS antenna assembly and associated equipment within the existing CL&P transmission line structure number 2997 ("Structure #2997"). Structure #2997 is located off Route 7, near the intersection of Routes 7 and Route 33, in the Town of Wilton (see USGS quadrangle for Norwalk North, Conn. - N.Y., dated 1960, photo revised 1971, photo inspected 1975 attached as Exhibit B).

The proposed access drive from the Wilton Station, off Old Station Road ("Access Drive") provides direct access to the transmission tower for construction activities and routine maintenance. A temporary staging area is proposed to be established near the curbed area surrounding the transmission tower as shown on the site plan attached as Exhibit C. Power and telephone lines exist within the transmission line right of way ("ROW") and an existing utility pole approximately 20 feet southwest of the proposed location of the base station equipment will provide service. All proposed construction activities are within the existing CL&P ROW. The existing vegetation provides year round partial screening so that the equipment is only partially visible from the parking lot or the adjoining road.

The top of the antenna assembly will extend approximately 10 feet above the top of the existing transmission line lattice structure. The centerline of the antenna will be approximately 96 feet, 4 inches above ground level as shown on the plan attached as Exhibit D. The design is to support O.C.I. antenna assembly only. The height of the adjoining transmission towers is similar to the height of structure #2997 which is approximately 90 feet. Structure #2998 is located approximately 437 feet southerly at an elevation ("AMSL") approximately 20 feet lower than structure #2997. Structure #2996 is located approximately 410 feet northerly at an elevation ("AMSL") approximately the same elevation as structure #2997. The distance, height and structure information was provided to O.C.I. by CL&P, the elevation was determined based on the USGS Location Map. In addition, O.C.I. also investigated other transmission structures along the same transmission line. The other structures were rejected because of radio frequency requirements, closer proximity to residences, or requirements for more disturbance for access and utility routing. O.C.I. also proposes to place associated equipment adjacent to the structure within the transmission line ROW. The communications equipment will be installed on an 10 foot by 5 foot 6 inch concrete pad (see attached Exhibit E). This is the minimum size necessary for the layout and access to the communication equipment. A back-up battery system is contained within the power cabinet which consists of four gel pack batteries providing one hour of back-up service.

Surrounding Land Uses

The proposed project area is located off Route 7, near the intersection of Routes 7 and Route 33, in the Town of Wilton, as shown on Exhibit F. The existing transmission

tower is located in the parking lot of the Wilton Railroad Station. The zoning designation of this site is Single Family Residence (R-1A) but the site is bounded by commercial zoning and uses to the North, East and South. This includes a three story office building and parking lot to the Northeast and a multi-business building that shares the parking lot of the railroad station. To the West, the land use is the railroad tracks and station. Additional surrounding land uses include transmission tower lines, ROW, local and state roads.

Proposed Service Area

The antenna assembly will be used to provide coverage to the surrounding area in the Town of Wilton. This coverage will include approximately 1.5 miles of Route 7, 0.9 miles of Route 33, 0.7 miles of Route 106 and a portion of the Town of Wilton. A coverage map of this area is attached as Exhibit G.

The project will not have a Substantial Adverse Environmental Effect

The project does involve an increase of approximately 10 feet above the existing lattice structure to 100 feet above ground level; however, this increase will not cause a substantial adverse environmental effect. The Project will not result in the construction of a new structure which could be vertically out of scale with the surrounding landscape. The businesses in the surrounding neighborhood currently have a clear view of the transmission line structures. The antenna assembly and other associated equipment blends in with the other structures within the transmission line. The existing vegetation provides sufficient screening of the base station equipment from views of the closest

adjoining businesses and parking lot (see photographs #1 View from the North, #2 View from the South, #3 View from the East, and #4 View from the West).

The limits of disturbance of all construction activities will be confined to the minimum extent possible. The utility routing will be from the paved parking lot and the equipment will be located on the existing terrain. A review of the municipal wetlands map has determined there are no wetlands issue at the site.

The operation of the antenna will not increase the total radio frequency electromagnetic power density at the site to a level at or above applicable standards, as demonstrated on the power density table attached as Exhibit H. Total calculated power density at the base of the tower, mW/cm2 is 0.0179, which is 1.8% of the MPE of the proposed facility.

Conclusion

O.C.I. will not have a need to construct a telecommunications tower to provide coverage for the Project area if the Connecticut Siting Council determines that no Certificate is required. This Project is consistent with the legislative finding outlined in Section 16-50g. of the General Statutes of Connecticut that seeks to avoid the unnecessary proliferation of towers in the State.

Section 16-50k (a) of the General Statutes of Connecticut provides that a Certificate of Environmental Compatibility and Public Need is not required for a proposed modification of a facility that the Council determines does not have a "substantial adverse environmental effect." The environmental effects of that proposed PCS antenna installation have been evaluated and it is submitted that the modifications

will not result in a substantial adverse effect on the environment or ecology, nor will there be damage to the existing scenic, historical or recreational values. Accordingly, we request that the Council determine that the proposed modifications to an existing facility will have no such substantial adverse environmental effect and, therefore, that no

Certificate is required.

Communications regarding this petition for a Declaratory Ruling should be directed to:

Sharon Burrows
Regional Director - CRA
for Omnipoint Communications, Inc.
Telephone: (203) 855-5414
Fax: (203) 855-5474

Questions or other communications for the Connecticut Light & Power Company regarding this petition should be directed to:

Dorian E. Hill, Principal Engineer Transmission Line & Civil Engineering Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 Telephone: 860-665-6933

EXHIBIT A Letter of Authorization

Northeast Utilitles System 107 Selden Street, Berlin, CT 06037

Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5000

June 11, 1998

Ms. Sharon Burrows Regional Director - CRA Omnipoint Communications, Inc. 25 VanZant Street, 4th Fl. Norwalk, CT 06855

Re: Site Permitting Authorization Wilton Telecommunications Site

Dear Ms. Burrows:

Authorization is hereby given to Omnipoint Communications, Inc., its employees and its duly authorized agents and independent contractors (hereinafter collectively referred to as "Omnipoint"), to apply for any and all local municipal, state and federal licenses, permits and approvals, including but not limited to Connecticut Siting Council, building permits, zoning variances, zoning special exceptions, site plan and subdivision approvals, driveway, wetlands and terrain alteration permits, which are or may be necessary or required for Omnipoint to construct, operate and maintain a wireless communications system (PCS System), and/or antenna site on the following property over which The Connecticut Light & Power Company (CL&P) has easement rights:

CL&P Structure #2997 Old Station Road Wilton, Connecticut

The foregoing authorization is given subject to the following conditions:

- This authorization shall be nonexclusive. Nothing herein shall prevent or restrict CL&P from authorizing any other person or entity to apply for any similar licenses, permits or approvals to construct, operate and maintain any other communication system or facility of any type on the property at any time.
- 2. This authorization shall not obligate CL&P to pay for or reimburse any costs or expenses or to provide any assistance of any kind in connection with any applications, or bind or obligate CL&P to agree or be responsible for any on-site or off-site improvements, development restrictions, impact fees or assessments, capital improvement charges, bonds or other security, or any other fee, assessment, charge or expense imposed or required as a condition of any license, permit or approval. Omnipoint shall be solely and fully responsible for all fees, charges costs and expenses of any kind in connection with any applications. CL&P agrees to reasonably cooperate with Omnipoint in signing such applications or other similar documents as may be required in order for Omnipoint to apply for any license, permit or approval.
- 3. This authorization shall not be deemed or construed to grant or transfer to Omnipoint any interest in the property, whatsoever, and shall not in any respect obligate or require CL&P to sell, lease or license the Property to Omnipoint or otherwise allow Omnipoint to use or occupy the property for any purpose, regardless of whether any licenses, permits and approvals applied for by Omnipoint for the property are granted. Omnipoint understands and acknowledges that any and all applications filed by Omnipoint for the property at Omnipoint's sole risk and without any enforceable expectation that the property will be made available for Omnipoint's use.

OS3422 REV. 8-95

- 4. Omnipoint shall be required to supply to CL&P, free of charge and contemporaneous with Omnipoint's filing of same, a complete copy of any and all applications, plans, reports and other public filings made by Omnipoint with any local, municipal, state or federal governmental or regulatory officer, agency board, bureau, commission or other person or body for any licenses, permits or approvals for the property, and to keep CL&P fully informed on a regular basis of the status of Omnipoint's applications.
- 5. This authorization shall automatically expire six (6) months after the date of this letter, unless extended in writing by mutual agreement of CL&P and Omnipoint.

Very truly yours,

Salvatore Giuliano, Manager Real Estate and Land Planning

LMC/cs/w

AGREED TO on behalf of Omnipoint Communications, Inc.

Duly Authorized

EXHIBIT B

Quad Map

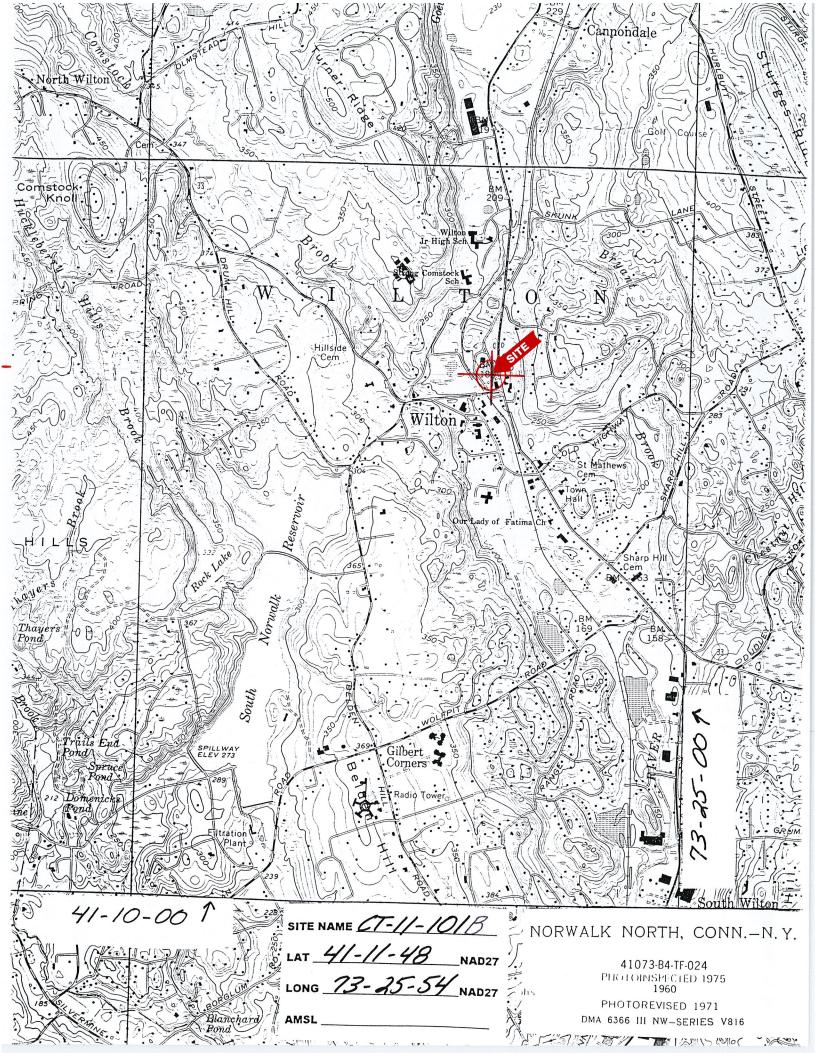


EXHIBIT C

LE-1

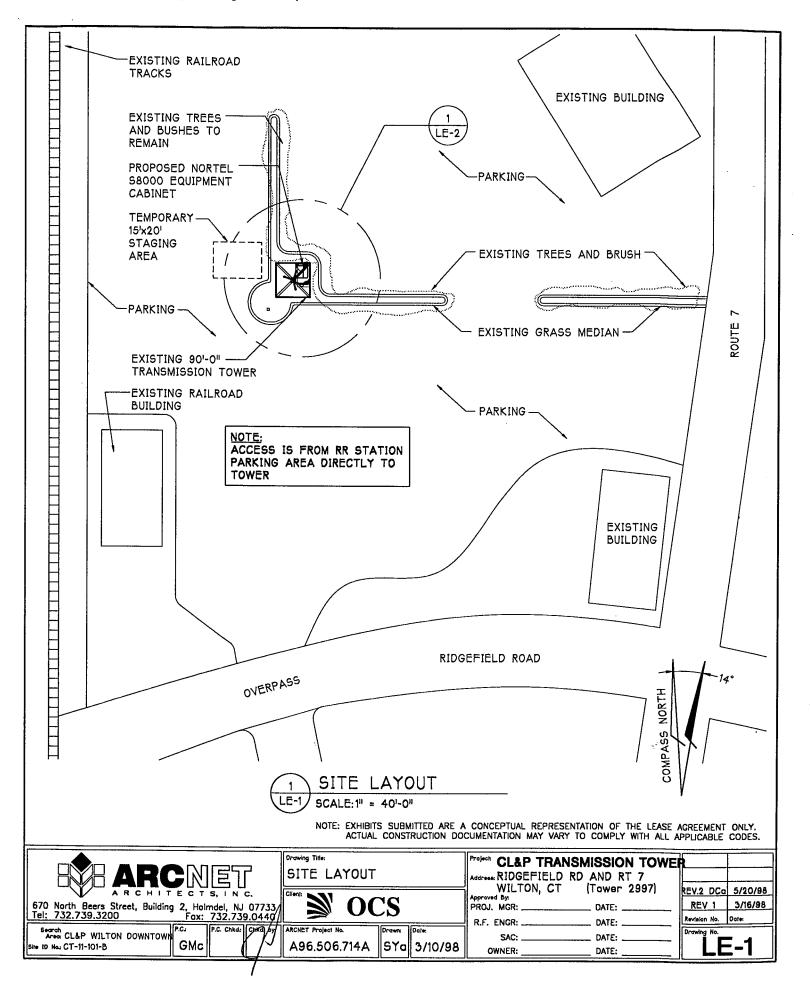


EXHIBIT D

LE-3

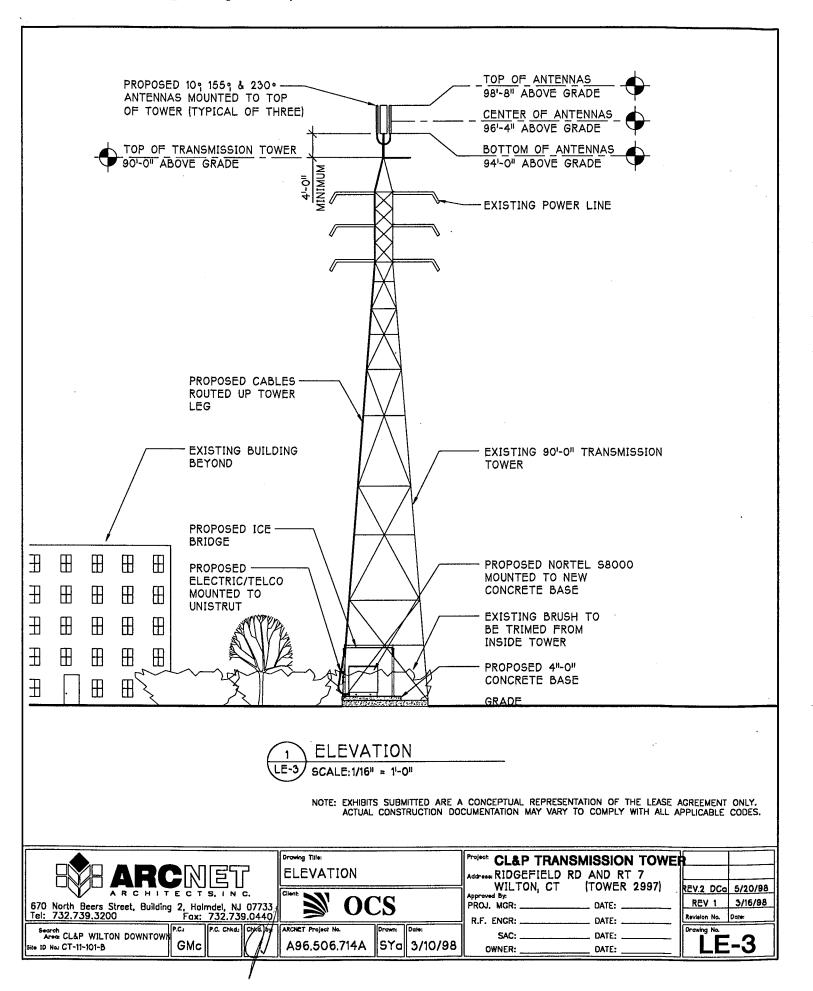


EXHIBIT E

LE-2

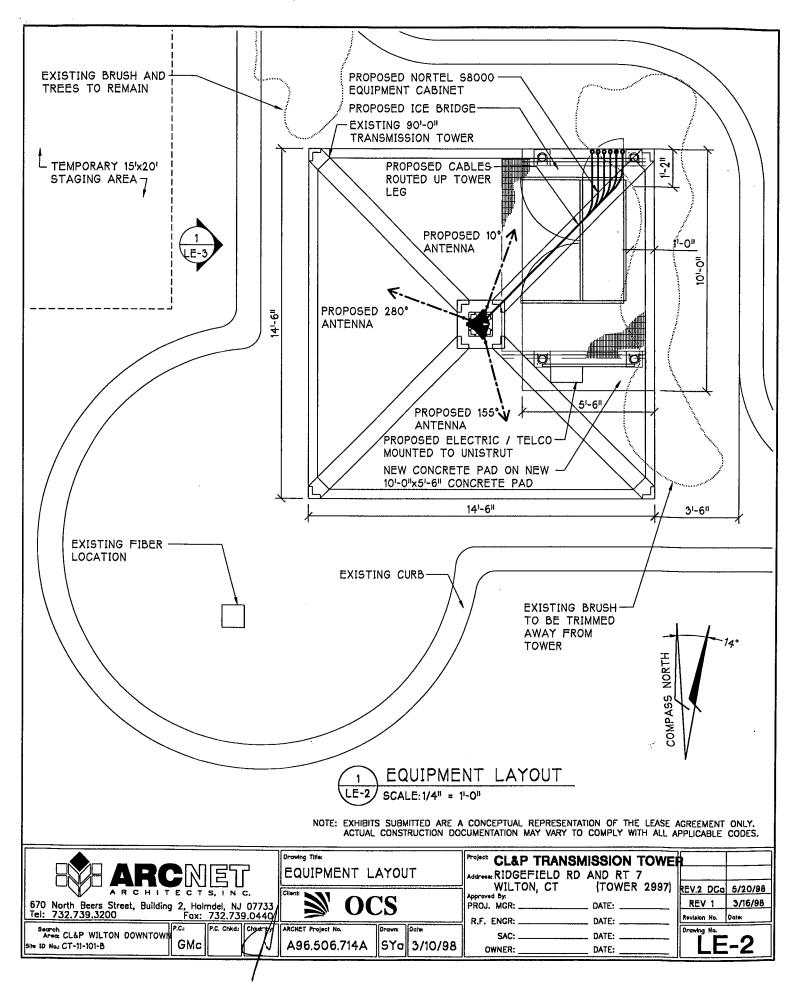


EXHIBIT F

Street Level Map

EXHIBIT G

RF Coverage Map

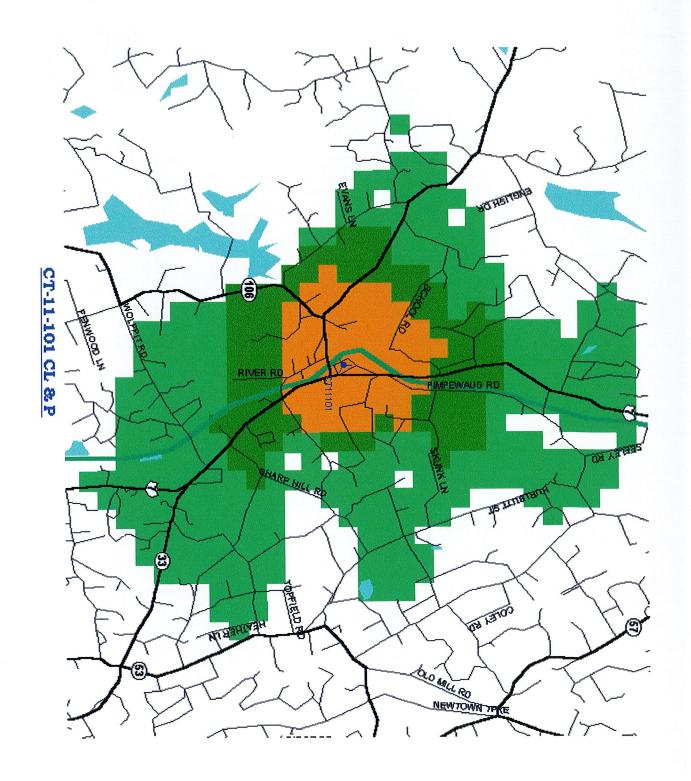


EXHIBIT H

Power Density Calculations

Non Ionizing Radiation Computation

Site Location: Ridgefield Rd. and RT 7
Wilton, CT

Description: The proposed facility is an EMS Wireless AcCELLeratorTM Antenna assembly mounted on top of an electrical transmission tower. The AcCELLeratorTM is an antenna mounting system that enables rapid deployment of a three-sector PCS array and ancillary equipment. The antennas used by Omnipoint in the AcCELLerator TM are the EMS RR90-17-00DP DualPolTM units.

Analysis: The non-ionizing radiation analysis conducted here is in accordance with FCC OET Bulletin 65, 1997 edition, and demonstrates that the power density due to the proposed antenna array is well below either the more stringent of the FCC or CT standard for public exposure at the base of the transmission tower. Calculations at the property boundary were not applicable in this scenario, as the towers are not normally fenced.

Calculations: The three-sector array is treated as a single spherical radiator (as is customary at PCS frequencies) centered at the lowest radiating part of the antenna. A ground reflection coeficient of 1.6 is used. This is a worst case analysis that insures the actual exposure at the base of the tower is well below the calculated value.

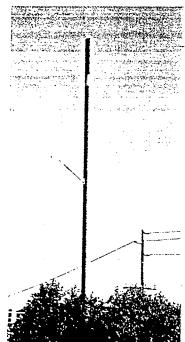
Top of tower above grade	90'
Radiation point above grade	99'
Antenna tip above grade	105'
Calculated power density at base of tower, mW/cm ²	0.0179
Maximum Permissible Exposure (MPE), mW/cm ²	1
Percentage of MPE of proposed facility at tower base	1.8%

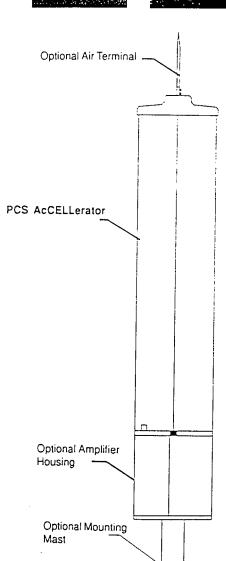
EXHIBIT I

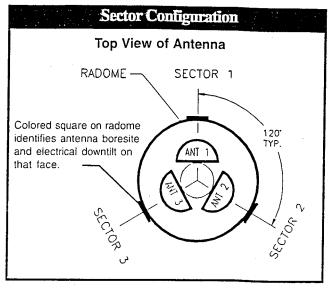
Antenna and Associated Equipment Specifications

AcCELLerator™ T-Series









Mechanical Specification			
Parameter	Specification		
Dimensions Height	72 (nch (163 cm)		
Diameter	16 inch (41 cm)		
Rated Wind Velocity	100 mph (161 kph)		
Laterai Thrust € 100 mph	250 lps (1116 N)		
Weight	150 lbs (68 kg)		
Mounting Hardware	4 ea 3 4 · 10 Bolts on 12 inch		
	boit circie		

Parameter	Specification
Sector to Sector Isolation	> 40 dB
Port to Port Isolation	> 20 d 3*
Jumper Capie Connectors	7-16 DIN (female)
Lightning Protection	Chassis Ground
	(Optional air terminal kit)

For all other electrical performance specifications including radiation pattern data, please refet to the individual antenna data sheet.

> 30 dB port to port isciation available on special order.

Accessories			
Model Number	Description	Comments	
LPK-1	Air Terminal	Lightning protection kit including 24 in. air terminal and 12 ft. #4 AWG copper pigtail.	
LNAC-X-X	Amplifier Housing	16 inch O.D. x 24 inch tall canister for housing receive low noise amplifiers. Can be supplied from factory with LNAs pre-installed and tested.	

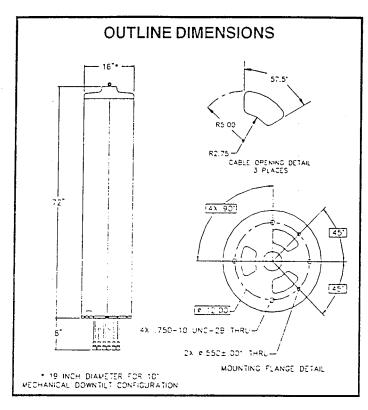
.Mounting Options		
Model Number	Description	Comments
MTG-A00-00	Mounting Plate	16 inch dia. steel plate with mating hole pattern for AcCELLerator** series antennas. Use to make your own custom, mount or monopole adapter.
MTG-A10-00	Mounting Mast	10 ft. x 4 1/2 in. O.D. galvanized steel pipe with welded antenna mounting plate.
MTG-A20-00	Mounting Mast & Wall Mount Kit	10 ft, mounting mast plus brackets for wall attachment.

AcCELLerator™ T-Series

1850 - 1990 MHz

Base Station Antennas

INTRODUCTION



Drawing from more than 25 years in the development of high reliability systems, EMS *Wireless* has applied that knowledge and experience to the needs of commercial wireless communication service providers.

COMPLETE 3 SECTOR COVERAGE IN 1 ENCLOSURE

Each Accellerator™ series antenna contains three EMS Wireless DualPol™antennas, oriented 120° apart inside a single aesthetically pleasing enclosure.

FASTER ZONING APPROVAL

Having no visable cables or individual antennas makes zoning approval a breeze! Accellerator*** series antennas can be mounted on unobtrusive monopoles or existing structures such as roof tops, utility poles and billboards.

LOWER INFRASTRUCTURE COST

Fewer antennas means reduced windloads, lighter duty towers, no antenna platform, lower lease costs from landlords and faster site installation. AccelleratorTM series antennas can be installed in most roof top applications with no additional screening required.

JUMPER CABLES INCLUDED

Each AccelleratorTM series antenna comes ready to install with factory attached and weatherproofed, high quality, 1/2 inch diameter, flexible jumper cables.

CUSTOM TAILORED FOR YOUR APPLICATION

Select any three EMS *Wireless* 48 to 60 inch PCS antennas and the sector where you would like it installed. Mix and match beamwidths, electrical downtilts and polarization options to meet your exact needs. We can even adjust the azimuth beam pointing direction for one or more sectors! For more information contact EMS *Wireless* customer service.

TXXXX-XX-XXXDP Frequency P = 1850 - 1990 MHzCable Connector D = 7-16 DIN (female)Sector 3, Electrical Downtilt (0°, 2°, 4°, 6°) Sector 2, Electrical Downtilt (0°, 2°, 4°, 6°) Sector 1, Electrical Downtilt (0°, 2°, 4°, 6°) Gain (dBi) Horizontal Beamwidth Polarization R = Slant 45° DualPolTM S = Vertical Tx + Slant 45° DualPol™ Rx R = OptiRange™ F = OptiFill™ Series T = Tri-Sector Note: Model numbering shown assumes antennas of the same gain, beamwidth, polarization and type will be used on each sector. For information on how to specify custom configurations, contact, customer service

NOTE: Values are typical and variations may occur as a result of obstructions at the actual location where the antenna is installed. The type of tower may also cause variations.

1.12 S8000 Outdoor BTS Specifications

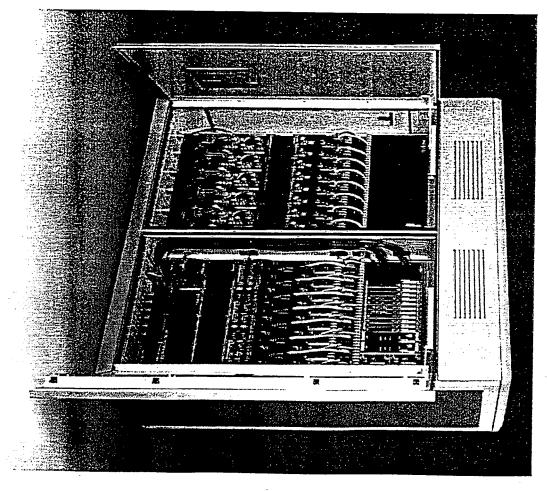
Table 92. S8000 Outdoor BTS Cabinet General Specifications

	S8000 Outdoor Cabinet
Height	1.60 m (63")
Width	1.35 m (53")
Depth	0.65 m (25")
Footprint	1.80 m ²
Maximum Weight	480 kg (1058 lbs.)
Empty weight	148 kg (326.2 lbs.)
Power Rating	240 V +/- 10% (37.6 Amps)
Main Circuit Protection	50 Amps
Max. Heat Dissipation	22100 Btu/Hour
Normal Heat Dissipation	11006 Btw/Hour
Operating Temperature	-40°C to 50°C (-40°F to 122°F)
Maximum Operating Humidity	100%
Max level of acoustic noise	65 dB
Ground Cable	2/0 MCM
Antenna Connectors	7/16 DIN Type Female
Cabinet output	40.3 dBm
Receive sensitivity	-108 dBM
Output power at cabinet antenna connector (H2D)	38.0 dBm

A World of Networks

Traffic growth -> Highest density: 8 radios per cabinet

- up to S233 in one cabinet
- up to S888 in three cabinets
- Limit space availability -> Smallest footprint: 20 sq. ft. per cabinet no side or back clearance required
- Reduced cell count -> Best radio performance: 56 dBm EIRP minimum, -108 dBm sensitivity
- Integrated lightning protection, battery backup
- Extended environment operation: 40 to +122 F, Seismic Zone 4
- 1110 lbs, 63" x 53" x 25"
- Full range of options: extended battery backup, combining, microwave compatibility



DRX Based BTS

Photographs

